

MONTHLY WEATHER REVIEW,

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(General Weather Service of the United States.)

WAR DEPARTMENT,

Office of the Chief Signal Officer,

DIVISION OF

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

INTRODUCTION.

In preparing this REVIEW the following data, received up to October 14th, have been used, viz: the regular tri-daily weather charts, containing the data of simultaneous observations taken at 131 Signal Service stations and 12 Canadian stations, as telegraphed to this office; monthly journals and means 147 and 152 respectively, from the former; reports from 29 Sunset stations; 240 monthly registers from Voluntary Observers; 28 monthly registers from United States Army Post Surgeons; Marine Records; International Simultaneous Observations; monthly reports from Voluntary Observers in, and the local Weather Service of, Missouri; reliable newspaper extracts; special reports.

BAROMETRIC PRESSURE.

Upon chart No. II is shown by the isobaric lines the general distribution of atmospheric pressure, as reduced to the sea level, for the month. East of the Rocky Mountains the pressure during the month has been above the average for the past seven years, at all stations except Key West, Punta Rassa, New Orleans, Vicksburg, and Pembina, at which stations the difference is zero. The excess has in general ranged from 0.02 at the other stations on the Gulf coast, 0.05 along the Atlantic coast, in the Lake region and Northwest to 0.08 in the Ohio valley. On the Pacific coast the difference is very small.

The *Local Barometric Ranges* have been greatest over the Northwest and Lake Region and over a narrow belt from New Orleans to Ohio in the track of storm area No. I; and least along the South Atlantic coast and from Texas to California. Taken by districts they vary as follows: Atlantic States from 0.79 of an inch at Eastport to 0.26 at Key West; Gulf States, 0.42 at St. Marks and 0.45 at Indianola to 0.82 at New Orleans; Tennessee and Ohio Valley, 0.72 at Cairo to 0.96 at Cincinnati; Lake Region, 0.86 at Oswego and 0.71 at Milwaukee to 1.05 at Port Huron; the Northwest, 0.66 at St. Louis to 1.05 at Yankton; Rocky Mountains, 0.43 at Santa Fe to 0.59 at Denver; Pike's Peak, 0.37; Western Plateau, 0.31 at Tucson, Ariz. to 0.45 at Pioche and Winnemucca and 0.66 at Boise; California, 0.24 at San Diego to 0.29 at Red Bluff and 0.31 at Visalia; Oregon, 0.72 at Roseburg and 0.89 at Portland.

Areas of High Barometer.—Of these, five have been sufficiently marked to merit description.

No. I.—This area was present off the coast of Oregon and Washington Territory at the morning report of September 1st, the barometer at Portland being 0.14 inch above the normal. The area moved eastward, and on the morning of the 3rd, was central near Bismarck, the barometer at that station being 0.29 inch above the normal. North and northwest winds prevailed throughout the Northwest, the Upper Mississippi and Lower Missouri valleys, and over the Upper Lakes. The minimum temperature reported was 33° at Fort Stevenson, Dakota. Moving southward the area was central at North Platte, Nebraska, on the morning of the 4th, barometer 0.22 inch above the normal. On the morning of the 5th the area was central near Cairo, Illinois, barometer 0.12 inch above the normal; the temperature in the Lower Lake region, the southern portion of the Upper Lakes and in Upper Mississippi valley, was slightly below the normal, and generally clear weather prevailed throughout the United States, excepting in the extreme Northwest and in Maine. During the 6th and 7th the area moved eastward and disappeared off the South Atlantic coast. High winds were reported from stations on Lake Michigan on the 3rd.